Today’s Topic?

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What I want to talk about:

- The conversion of Perhydrocyclopentanophenanthrene to the mediator of electrolyte balance in the kidney

What you want me to talk about:

- The history of aviation
- Modern techniques in flying
- Futuristic airplanes, what to expect

What we are going to talk about:

Skin Cancer

Three Types of Skin CA

- Basal Cell Carcinoma
- Squamous Cell Carcinoma
- Malignant Melanoma

Basal Cell Carcinoma

- Most common
  - 60 to 75% of all skin malignancies
- Males vs Females
  - ratio 2:1
- Occurs in areas of chronic sun exposure
- Older patients and light complection at high risk

Basal Cell (con't)

- Excisional vs Incisional biopsy
  - avoid shave biopsy
- Treatment by surgical excision
  - 2-4mm margins (more for large lesions)
- Moh's micrographic surgery optional
- Radiation therapy
  - same cure rate, more morbidity

Squamous Cell Carcinoma

- Much less common than Basal Cell
- Occurs in areas of chronic skin damage
  - ex) Solar keratosis, Xeroderma Pigmentosum, radiation, Leukoplakia
- More aggressive than Basal Cell

Squamous Cell (con’t)

- Margolin’s Ulcer
  - most aggressive form
  - burns
  - stasis ulcers
  - decubitous ulcers
  - other chronically inflammed areas

Squamous Cell (con’t)

- Treatment
  - excision 5-10mm margins
    - consider lymph node disection
  - Moh’s micrographic surgery
  - Radiation

Malignant Melanoma

- Case study: 56 yo male presents with a large mole on his right shoulder that recently had changed color:
  - excised by family doctor
  - Found to be malignant melanoma
  - 3 yrs later had 5inch tumor in abdomen
  - Died 1 month later
  - Significant past history

Malignant Melanoma (con't)

- 2% of all malignancies
- extrememly rare early in life
- higher incidence with light complection and high sun exposure

Malignant Melanoma (con't)

- Four types
  - Superficial spreading
  - Acral lentiginous
  - Nodular
  - Lentigo Maligna

Malignant Melanoma (con't)

- Diagnosis
  - EXCISIONAL biobsy
  - Avoid shave biopsy
  - Depth of lesion prognostic for curability
    - <0.75mm has 90% cure rate
    - >4.0mm has 80% chance of matastases
  - Check for lymph nodes
  - Computed Tomography (CT) scan

Malignant Melanoma (con't)

- Treatment
  - 1 to 3cm tumor free margins
    - or 1cm for each 1mm of tumor thickness
  - Lymph node disection
  - Chemotherapy
  - Prevention
    - avoid excessive sun
    - type and time of sun exposure?
    - Sunscreen?

Summary

- Three types of skin cancer
- Diagnosis and treatment revolve around surgical excision
- Prevention is primary goal
- I really should learn more about airplanes